

REMARKS

Claim 26 has been amended. Additionally, the specification has been amended.

Claims 1-26 are pending in the present application.

The above amendment is made in response to the Office action of November 20, 2002. Applicants have enclosed herewith a copy of the marked-up version of the amended specification as required by 37 C.F.R. 1.121. The Examiner's reconsideration is respectfully requested in view of the above amendment and the following remarks.

The Office Action notes that the reference Hall, W., "Ending the Tyranny of the Button," cited in the Information Disclosure Statement (IDS) submitted on June 25, 2002 was not considered because the right margin on certain of the pages were truncated during the photocopy process. It is also noted that a PCT search report was submitted on June 25, 2002, but was not considered because it was not cited in the IDS. Applicant will submit this material in due course.

The Office Action objects to the specification because it cites a copending related application. The Examiner advises that the cited application be placed in the "Cross-Reference to Related Applications" section. The specification has been amended in accordance with the Examiner's suggestion. Withdrawal of the objection to the specification is respectfully requested.

The Office Action objects to the drawings as indicated in the attached PTO-948 form. Formal corrected drawings will be filed on or before allowance.

Claims 1-17 and 26 are rejected under 35 U.S.C. §112, second paragraph, as incomplete for omitting essential elements, such omission amounting to a gap between the elements. The rejection is respectfully traversed.

According to the Examiner, the omitted elements are the essential elements to perform the function of hyperlinking, such as, identifying sources and destinations, generating and managing links and activating links to retrieve documents. However, it is respectfully submitted that claims 1-17 and 26 are complete and recite the essential elements. For example, independent claim 1 recites a generalized automatic hyperlinking system, comprising source-level partial hyperlinking; source-level dynamic hyperlinking; static hyperlinking; static hyperlinking with intermediate links; and incremental hyperlinking. Each of these components is fully described in the specification in such a way that explains how the sources and destinations are identified and the links are managed and activated to retrieve documents. It is not necessary to provide such detail in a claim as to each of the components of a system in order to comply with 35 U.S.C. §112, second paragraph. In regard to claim 26, it is imperative that the Examiner understand that these claims are written in means-plus-function format, and must be read with reference to the specification. Withdrawal of the rejection of claims 1-17 and 26 under 35 U.S.C. §112, second paragraph, is respectfully requested.

In asserting that claim 26 fails to comply with 35 U.S.C. §112, sixth paragraph, the Examiner states that this claim attempts to use a “means” clause to recite a claim element as a means for performing a specified function. The Examiner states that because there is no function specified by the words preceding the means clause, it is “impossible” to determine the

equivalents of the element. Claim 26 has been amended to clarify that it is to be construed as a means-plus-function claim under 35 U.S.C. §112, sixth paragraph.

The Office Action rejects claims 1-26 under 35 U.S.C. §101 because the claimed invention is supposedly directed to non-statutory subject matter. Specifically, the Examiner asserts that claims 1-26 are lacking nonfunctional descriptive material and lacking physical structures or materials comprising of hardware or a combination of hardware and software within the technological arts (i.e., a computer) to produce a “useful, concrete and tangible” result. The rejection is respectfully traversed.

It is respectfully submitted that this rejection is clearly erroneous. The claims recite subject matter drawn to materials comprising hardware or a combination of hardware and software that is within the technological arts and that produces a useful, concrete and tangible result. Hyperlinking is a well-known mechanism used to access information on local machines, an intranet, or the Internet. Since the technological arts cover computer-related inventions, it is not understood why the Examiner believes that the claimed invention is not within the technological arts. The invention provides a generalized automatic hyperlinking system to help maintain, for example, complex multimedia documents. Withdrawal of the rejection of claims 1-26 under 35 U.S.C. §101 is respectfully requested.

Claim 1 is rejected under 35 U.S.C. 103 (a) over U.S. Patent No. 6,092,074 to Rodkin et al. (hereinafter Rodkin) in view of U.S. Patent No. 5,794,257 to Liu et al. The rejection is respectfully traversed.

Claim 1 recites “[a] generalized automatic hyperlinking system comprising: source-level partial hyperlinking; source-level dynamic hyperlinking; static hyperlinking; static hyperlinking with intermediate links; and incremental hyperlinking.”

Rodkin discloses a system for automatically providing hypertext for character strings of a text file at a content server. A central server provides central control of the links of text files of a plurality of content servers in an information network such as the Internet. The central server intermittently updates each content server with new character strings and/or destination addresses, such as Uniform Resource Locators (URLs).

Liu discloses a system for automatic hyperlinking by compiling link specifications. A link specifications and an electronic manual are provided to an auto linker which in conjunction with a run-time media engine provides hyperlinked manuals. The auto linker comprises a link generator for generating links and a link verifier for checking and modifying the links that are generated. The run-time media engine comprises an event handler and a script interpreter and handles the user interaction. Through the interaction of then hyperlinks from the auto linker with the run-time media engine the hyperlinked manuals are produced.

In asserting that the present invention would have been obvious to one skilled in the art, the Office Action refers to Rodkin, at col. 2, lines 17-29 and 42-58, for the feature of “static linking,” but this portion of the text merely describes traditional “hard-coded” linking. Under hard-coded linking, the destination is completely fixed in the document. There is no chance for any flexibility during browsing. In contrast, static hyperlinking as described in the present application refers to a “batch-mode” execution of incremental, dynamic hyperlinking. It is a

mechanism for eliminating the need of extra computation (as required with dynamic hyperlinking) at browsing time.

The Office Action acknowledges that the feature of “static linking” disclosed by Rodkin is not the same as “static hyperlinking *with intermediate linking* (emphasis added)” as recited in claim 1. Liu is relied upon to make up for the deficiency. The Office Action cites Liu, at col. 4, line 62 to col. 5, line 4, for chain links, which the Examiner asserts are the same as *intermediate linking*. However, Liu’s method for constructing links is completely different from hard-coded linking. One of ordinary skill in the art would not have been motivated to combine the Liu’s chain links with Rodkin’s hard-coded links (which the Examiner asserts is static hyperlinking). Indeed, it would not have been even possible to combine the chain links as described in Liu with the traditional hard-coded links mentioned by Rodkin.

Liu, at Fig. 2, illustrates that a document and link specification are input into a hyperlink generator 36, which generates a hyperlinked multimedia service manual 39. Rather than using hard-coded links, the invention uses a link specification language to specify the links. For example, it may be necessary to provide cross-references to tables by specifying chain links in the specification language. Once the links are specified, the actual links are automatically generated by the hyperlink generator 36. Thus, Liu describes a method that is completely different from the use of hard-coded linking described in Rodkin. For that reason it is respectfully submitted that neither reference, either alone or in combination, teaches or suggests the subject matter of claim 1.

Because Rodkin, either alone or in combination with Liu, fails to disclose one or more feature recited in claim 1, this reference would not have anticipated or rendered obvious the

subject matter of claim 1. Accordingly, withdrawal of the rejection of claim 1 under 35 U.S.C. 103(a) is respectfully requested.

Claims 2-26 are rejected under 35 U.S.C. 103(a) over Rodkin and Liu as applied to claim 1, further in view of U.S. Patent No. 5,708,825 to Sotomayor and U.S. Patent No. 5,694,594 to Chang. The rejection is respectfully traversed.

Sotomayor discloses a method and apparatus to enable scanning one or more documents, automatically identifying significant key topics, concepts and phrases in the documents, and creating summary pages for, and hyperlinks between, some or all of these key topics.

Chang discloses a system for linking hypermedia data in accordance with associations of source and destination data objects and similarity thresholds without using keywords or link-defining terms.

As discussed for claim 1, motivation is lacking to combine the references in the asserted manner. Sotomayer and Chang fail to overcome this deficiency with respect to claims 2-6, which depend from claim 1. Thus, it is respectfully submitted that dependent claims 2-6 are also patentable over the cited references.

Independent claim 7 recites, *inter alia*, "a generalized automatic hyperlinking system comprising:...link management *connected to said initial semi-link generator*." Independent claim 9 recites, *inter alia*, "a generalized automatic hyperlinking sytem comprising...a final link generator connected to said destination identifier; and link management *connected to said final link generator*." Independent claim 20 recites, *inter alia*, "a method for automatic hyperlinking comprising... utilizing link management." Claim 26 recites, *inter alia*, "means for providing a link browser *connected to said means for link management*." (Emphasis added).

It is respectfully submitted that the cited references, either alone or in combination, likewise fail to disclose or suggest the features of claims 7-26. The Office Action admits that the feature of link management is not disclosed by Rodkin, Liu, and Somtomayer. Chang is relied upon to make up for this deficiency. The Office Action refers to Chang, at col. 6, lines 25-51, for link management. However, the "link manager" of Chang merely calculates a user profile for a user-entered link and stores the result in internal cache. It would not make sense to incorporate this feature in a system that automatically generates links.

Because the cited references, either alone or in combination, fails to disclose one or more feature recited in independent claims 7, 9, 20, and 26, these references would not have anticipated or rendered obvious the subject matter of claim 7, 9, 20, and 26. Accordingly, withdrawal of the rejection of claim 1 under 35 U.S.C. 103(a) is respectfully requested. Claims 8, 10-19, and 21-25, which depend from claim 7, 9, 20, and 26, are likewise patentable over the cited reference for at least the reason discussed as well as for the additional features they recite. Accordingly, withdrawal of the rejection of claims 2-26 under 35 U.S.C. 103(a) is respectfully requested.

In view of the foregoing remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance. Early and favorable reconsideration is respectfully requested.

Respectfully submitted,

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